# UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

REALTEK SEMICONDUCTOR CORPORATION
Petitioner

V.

ANDREA ELECTRONICS CORPORATION
Patent Owner

Case: IPR2015-01391

Patent 5,825,898

DECLARATION OF DR. DAVID ANDERSON



## **Table of Contents**

|      |       | Page                                  | e |
|------|-------|---------------------------------------|---|
| I.   | Intro | oduction                              | 1 |
| II.  | Qua   | lifications and Compensation          | 1 |
| III. | Mat   | erials Considered2                    | 1 |
| IV.  | Leve  | el of Ordinary Skill In The Art       | 1 |
| V.   | My    | Understanding of Patent Law           | 1 |
| A    | . В   | urden of Proof5                       | 5 |
| В.   | . A   | nticipation5                          | 5 |
| C.   | . О   | bviousness                            | 5 |
| D    | . C   | laim Construction                     | 7 |
| VI.  | The   | '898 Patent                           | 1 |
| VII. | Pros  | secution History Of The '898 Patent12 | 2 |
| VIII | .Prio | r Art Analysis15                      | 5 |
| A    | . K   | ompis In View Of Hoshuyama16          | 5 |
|      | 1.    | Claim 1                               | 7 |
|      | 2.    | Claim 3                               | 7 |
|      | 3.    | Claim 4                               | ) |
|      | 4.    | Claim 9                               | ) |
|      | 5.    | Claim 11                              | 1 |
|      | 6.    | Claim 12                              | 1 |
|      | 7.    | Claim 13                              | 5 |
|      | 8.    | Claim 14 and 15                       | 5 |
|      | 9.    | Claim 16                              | 5 |
|      | 10.   | Claim 17                              | 3 |
|      | 11.   | Claim 18                              | ) |
|      | 12.   | Claim 20                              | ) |
| В.   | . K   | ompis In View Of Kates41              | 1 |
|      | 1.    | Claim 5                               | 2 |



| 2. Claims 7 and 8  | 47 |
|--|----|
| 3. Claim 21  | 47 |
| 4. Claim 22  | 47 |
| 5. Claims 24-28  | 52 |
| C. Kompis In View Of Hoshuyama And Fischer                   | 52 |
| 1. Claim 2   | 53 |
| 2. Claim 10  | 55 |
| D. Kompis In View Of Kates And Fischer                       | 55 |
| 1. Claims 6 and 23   | 56 |
| E. Kompis In View Of Hoshuyama, And Further In View Of Honma | 57 |
| 1. Claim 19  | 58 |
| IV Conclusion  | 50 |

Appendix 1 – *Curriculum Vitae* of David Anderson

Appendix 2 – List of Documents Considered

Appendix A – Claim Chart For U.S. Patent 5,825,898: Claims 1, 3, 4, 9, 11-18, And 20 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Martin Kompis et al., Noise Reduction for Hearing Aids: Combining Directional Microphones with an Adaptive Beamformer, J. Acoust. Soc. Am. 96 (3), September 1994 ("Kompis") In View Of U.S. Patent No. 5,627,799 to Hoshuyama ("Hoshuyama")

Appendix B – Claim Chart For U.S. Patent 5,825,898: Claims 5, 7, 8, 21, 22, And 24-28 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of James M. Kates et al., A Comparison Of Hearing Aid Array-Processing Techniques, J. Acoust. Soc. Am. 99 (5), May 1996 ("Kates")

Appendix C – Claim Chart For U.S. Patent 5,825,898: Claims 2 And 10 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of Hoshuyama, And Further In View Of Sven Fischer et al., An Adaptive Microphone Array for Hands-Free Communication, Proc. IWAENC-95, Røros, Norway, June 1995 ("Fischer")

Appendix D – Claim Chart For U.S. Patent 5,825,898: Claims 6 And 23 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of Kates, And Further In View Of Fischer

Appendix E – Claim Chart For U.S. Patent 5,825,898: Claim 19 Is Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of Hoshuyama, And Further In View Of Honma



I, David Anderson, hereby declare, affirm and state the following:

### I. Introduction

- 1. The facts set forth below are known to me personally, and I have firsthand knowledge of them.
- 2. I make this Declaration in support of a Petition for *inter partes* review of U.S. Patent No. 5,825,898 ("the '898 patent") (Ex. 1001).
- 3. I have been retained by Steptoe & Johnson LLP on behalf of Realtek Semiconductor Corporation.
- 4. I have been asked to provide my technical review, analysis, insights, and opinions on the materials I have reviewed in this case related to the '898 Patent, including the references that form the basis for the grounds of rejection set forth in the Petition No. IPR2015-01391 for *Inter Partes* Review of the '898 Patent ("Petition"), and the scientific and technical knowledge regarding the same subject matter at the time of the alleged inventions disclosed in the '898 Patent.

## II. Qualifications and Compensation

- 5. I am over the age of eighteen and I am a citizen of the United States.
- 6. I have summarized in this section my educational background, career history, and other relevant qualifications. My curriculum vitae, including my qualifications, a list of the publications that I have authored during my technical career, and a list of the cases in which, during the previous four years, I have



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

## **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

